

Green Parks Plan: One-Year Review

On Earth Day 2012, the National Park Service released the *Green Parks Plan* (GPP). The Plan provides a sustainability vision for the NPS through nine goals. Efforts made to achieve these goals during the *Green Parks Plan*'s first year led to the following accomplishments across the agency:

- Scope 1 and 2 greenhouse gases (GHGs) are down 13 percent and scope 3 GHGs are down 7 percent since 2008.
- Building energy intensity is down 18 percent since 2003 and water intensity is down 22 percent since 2007.
- Waste diverted from landfills is up to 92 percent for construction and demolition waste, and up to 28 percent for municipal solid waste.

These accomplishments directly result from innovation, collaboration, and leadership by NPS staff. As examples:

- Sequoia & Kings Canyon National Parks partnered with the City of Visalia, CA to provide hybrid-electric shuttle-bus services to its visitors.
- Denali National Park & Preserve staff worked with a recycling company in Fairbanks, Alaska to use waste glass to make glass tile and to liquefy plastics for energy recovery.
- National Mall and Memorial Parks were recently approved to receive two electric vehicles and four electric charging stations from the Department of Energy's Clean Cities Program.
- The Northeast Region has begun working to implement Energy Savings Performance Contracts (ESPCs) for select parks within the region.
- The Southeast Region has conducted energy audits for all parks in the region and used the findings to implement retrofits at many parks.
- Jewel Cave National Monument hosted a Climate Friendly Parks workshop that identified the park's high energy-consuming buildings and conducted an energy audit of the visitor center.
- Zion National Park, in coordination with the Zion Natural History Association and Xanterra Concessions, provides free "Zion Spring Water" at filling stations located throughout the park.
- Regional staff advanced mitigation plans such as the Midwest Region's Climate Change Response and Green Parks Plan and Pacific West Region's development of the C4 network.
- The Washington Office released the GPP Toolkit and My Green Parks engagement tool.









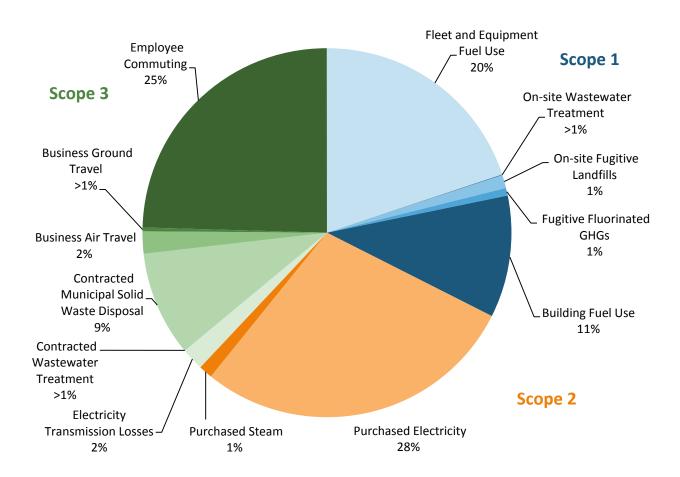


2012 Greenhouse Gas Emission Inventory

In 2012 the NPS prepared a Servicewide inventory of GHG emissions. The results of the inventory show that:

- Nearly 50 percent of GHG emissions stem from employee travel (fleet vehicles, commuting, and business travel).
- Nearly 40 percent of GHG emissions stem from park buildings (through fuel use and purchased electricity).
- Remaining emissions are from sources such as waste disposal and wastewater treatment.

Total GHG Emissions = 341,796 MTCO2E¹



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¹ Metric tons of carbon dioxide equivalent

Progress toward Meeting GPP Goals

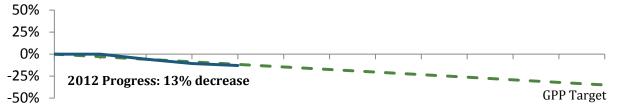
In 2012, the NPS tracked progress toward meeting key GPP goals including reducing GHG emissions, reducing water and energy use, and diverting waste from landfills. The results show that:

- GHG emissions from on-site fossil fuel combustion and electricity consumption from the grid have decreased by 13 percent from the 2008 baseline. This is on track toward the goal of reducing these emissions by 35 percent by 2020.
- GHG emissions from indirect emission sources such as commuter travel and off-site wastewater treatment have decreased by 7 percent. This is on track toward the goal of reducing these emissions by 10 percent by 2020.
- Energy use intensity has decreased by 18 percent from the 2003 baseline. This needs focus to achieve the goal of a 35 percent reduction by 2016.
- Potable water use intensity has decreased by 22 percent from the 2007 baseline measurement. This is on track to achieve the goal of a 30 percent reduction by 2020.
- Municipal solid waste diversion values are at 28 percent. This needs focus to achieve the goal of a 50 percent waste diversion rate by 2015.
- Construction and demolition waste values are at 92 percent. This is on track to achieve the goal of a 50 percent waste diversion rate by 2015.
- Fleet fuel use has increased by 12 percent since the 2005 baseline. This needs improvement to achieve the goal of a 20 percent decrease by 2015.

The figures below show 2012 performance trends for key GPP goals.



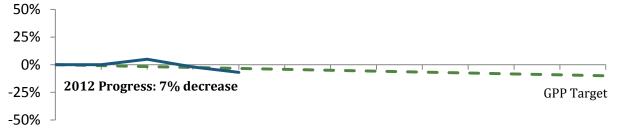
Be Climate Friendly and Climate Ready: The NPS will reduce Scope 1 and 2 GHG emissions by 35 percent by 2020 from the 2008 baseline.



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020



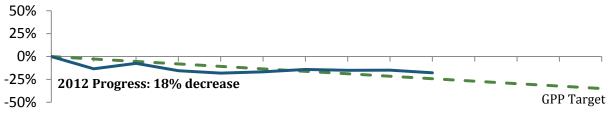
Be Climate Friendly and Climate Ready: The NPS will reduce Scope 3 GHG emissions by 10 percent by 2020 from the 2008 baseline



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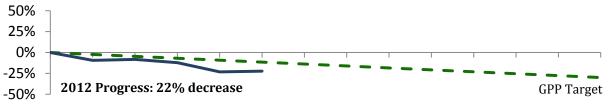
Be Energy Smart: The NPS will reduce Servicewide building energy intensity by 35 percent (measured as BTU used per square foot of building space) by 2016 from the 2003 baseline.



2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016



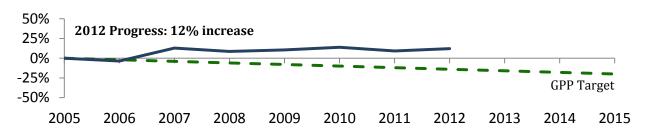
Be Water Wise: The NPS will reduce potable water use intensity by 30 percent (measured as gallons used per square foot of building space) by 2020 from the 2007 baseline.



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

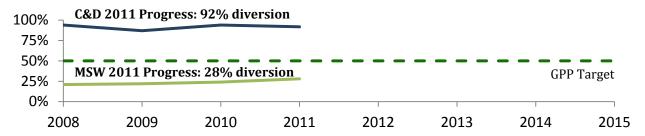


Green Our Rides: The NPS will increase the use of high-efficiency and low-GHG-emitting vehicles and will reduce fossil fuel consumption by 20 percent by 2015 from the 2005 baseline.





Buy Green and Reduce, Reuse, Recycle: The NPS will divert 50 percent of annual construction and demolition (C&D) waste and municipal solid waste (MSW) from landfills by 2015.



GPP Implementation Opportunities

NPS made progress in 2012. We moved forward because we challenged ourselves to view activities and programs through a lens of sustainability and to take advantage of green opportunities whenever possible. In the coming year, the Service will continue to demonstrate that resource stewardship and sustainability are closely connected and that each activity that advances conservation deserves to be commended and shared. Working together across NPS divisions, offices and parks, with visitors and partners, and on opportunities like those presented below we will continue to contribute to the global effort to conserve and protect our resources.

- We have a clear Call to Action. The Director's Call to Action asks us to 'Go Green' and to reduce our GHG emissions and increase our renewable energy in concert with the goals of the GPP.
- We are part of a community. Each day parks around the country demonstrate that we can do more together by working with our concessioners, partners, communities, volunteers, visitors, and stakeholders. Our communities help us innovate, learn, and achieve and will continue to be a vital part of our success in coming years.
- We have exceptional staff. Individuals throughout the NPS constantly take action to make small improvements in the way they live and work to advance our sustainability culture and vision.
- We have a mission that supports sustainability. Sustainability means "to create and maintain conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations." This definition resonates with NPS staff because it is core to our mission to "preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations."